CHAPTER 129: Surface Coating FACILITIES

**SUMMARY**: This regulation establishes consistent requirements for testing, evaluating and limiting the emissions of volatile organic compounds (VOC) and Hazardous Air Pollutants (HAP) from selected surface coating operations. VOC surface coating facilities can select one of three compliance methods: low solvent content coating technology, daily-weighted averaging, and add-on air pollution control devices.

**1. Scope/Applicability**

**A. Source applicability.** This Chapter applies to all new and existing surface coating facilities under the following surface coating categories:

(1) Surface coating of cans;

(2) Surface coating of fabric;

(3) Surface coating of vinyl;

(4) Surface coating of metal furniture;

(5) Surface coating of flatwood paneling; and

(6) Surface coating of miscellaneous metal and plastic parts and products.

**B. Testing and recordkeeping applicability.** The owner or operator of a surface coating unit, line or operation subject to this chapter shall comply with the testing and compliance procedures in Section 6, Test Methods and Compliance Procedures, and the certification and recordkeeping requirements in Section 7, “Initial Compliance Certification and Recordkeeping Procedures”, both of this chapter.

**C. Emission limitations applicability**

(1) Any surface coating unit, line or operation under categories 1 through 3, as specified in Subsection 1(A) above and within this chapter, whose maximum theoretical emissions of VOC from all coating units, lines or operations at the surface coating facility under the same surface coating category are ten (10) tons VOC per 12 month rolling period or greater, shall comply with the applicable emission limitations under Section 4 of this chapter.

(2) Any surface coating unit, line or operation under categories 4 through 6 as specified in Subsection 1(A) above and within this chapter, whose total actual emissions of VOC from all coating units, lines, or operations at the surface coating facility under the same surface coating category are 2.7 tons per 12 month rolling period or greater, shall comply with the applicable emission limitations under Section 4 of this chapter.

**D. Changes in applicability.** Any surface coating unit, line or operation that becomes or is currently subject to these provisions under Subsection 1(C) of this chapter remains subject to the provisions, even if its emissions later decrease, except that any source which has reduced its actual VOC emissions below the applicability threshold established under Subsection 1(C) shall be exempt from the applicable emissions limitations established underSection 4 of this chapter, provided that both of the following conditions are met:

(1) The owner or operator can demonstrate that the actual VOC emissions occurring in the consecutive 12-month period after said reduction was implemented were no more than 80% of the relevant applicability threshold; and

(2) The owner or operator accepts an enforceable permit containing restrictions which limit the combined actual VOC emissions, during any 12-month period from the source or all process operations associated with a specific classifiable process, below 80% of the relevant applicability threshold.

If the source's emissions later increase to greater than 80% of the applicability threshold during any consecutive 12 month period, then the facility must immediately comply with the emission limitations of Section 4 of this chapter.

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**E.** **Exemptions.** The following surface coating operations are exempt from the requirements of this chapter:

(1) Coating units, lines or operations whose total actual coatings usage from all coating units, lines or operations at the surface coating facility under the same surface coating category is less than 50 gallons per 12 month rolling period of coatings. Non-VOC coatings (such as zinc-arc, Ultra Violet, powder, or vapor curecoatings) are excluded when calculating compliance with this exemption;

(2) Facilities exclusively utilizing powder coatings or other non-VOC methods of coating are exempt from the requirements of this chapter.

(3) Surface coating of the following:

(a) Exterior of completely assembled aircraft,

(b) Major aircraft subassemblies which are exposed to the exterior of the aircraft,

(c) Automobile, light-duty truck, and heavy duty truck refinishing,

(d) Exterior of completely assembled marine vessels, and

(e) Major marine vessel subassemblies which are exposed to the exterior of the vessel;

(4) Coating units, lines or operations subject to the National Emission Standards for Hazardous Air Pollutants: *Surface Coating Processes*. Sections**:**

1. “National Emissions Standards for Aerospace Manufacturing and Rework Facilities" as published in 40 CFR 63, Subpart GG, as amended up to July 1, 2014;
2. "National Emission Standards for Pollutants for Shipbuilding and Ship Repair (Surface Coating) Operations" as published in 40 CFR 63, Subpart II as amended up to July 1, 2014; or
3. "National Emission Standards for Wood Furniture Manufacturing" as published in 40 CFR 63, Subpart JJ, as amended up to July 1, 2014 ; and

(5) Any facility with a permit issued under Subsection (1)(D).

**F. Applicable testing methods and compliance procedures.** The testing methods and compliance procedures for determining compliance with this chapter are described in Appendix A, which is incorporated into this chapter by reference.

**2. Definitions**

**A. General coating definitions**

(1) **Air-dried coating**. “Air-dried coating” means a coating that is dried by the use of air or forced warm air at temperatures up to 90 degrees Celsius (C) (194 degrees Fahrenheit (F)).

(2) **Baked coating**. “Baked coating” means a coating that is cured at a temperature at or above 90 degrees Celsius (C) (194 degrees Fahrenheit (F)).

(3) **Coating**. "Coating" means a material applied in a thin layer to a surface as a protective, decorative, or functional film. This term often refers to paints such as lacquers or enamels, but also refers to films applied to other materials such as varnishes, sealants, adhesives, inks, maskants, and temporary protective coatings. Such materials include, but are not limited to, paints, varnishes, sealants, adhesives, inks, maskants, and temporary protective coatings.

(4) **Coating unit**. "Coating unit" means a series of one or more coating applicators and any associated drying area or oven wherein a coating is applied, dried, or cured. A coating unit ends at the point where the coating is dried or cured, or prior to any subsequent application of a different coating. A surface coating operation does not require an oven or flashoff area in order to be included in this definition.

(5) **Control device**. "Control device" means equipment used to reduce, by destruction or removal, the amount of air pollutant(s) in an air stream prior to discharge to the ambient air.

(6) **Day**. "Day" means a period of 24 consecutive hours beginning at midnight, local time, or beginning at a time consistent with a surface coating facility's operating schedule.

(7) **Exempt compounds**. See VOC definition in Chapter 100.

(8) **Flashoff area**. "Flashoff area" means the space between the coating application area and the oven.

(9) **Major Subassembly**. “Major Subassembly” means a unit assembled separately but designed to be incorporated with other units into a larger manufactured product which performs a significant function such as propulsion, directional control, or is a significant portion of the exterior of the vessel or aircraft. Major subassemblies do not include simple items such as fixtures and fittings.

(10) **Maximum theoretical emissions**. "Maximum theoretical emissions" means the quantity of VOC that theoretically could be emitted by a surface coating unit, line or operation without control devices and is based on one of the following:

(a) The design capacity or maximum production capacity of the surface coating facility and 8,760 hours of operation per 12 month rolling period; or

(b) Hours of operation and/or design and/or process conditions, including operation rates, that are limited by enforceable permit conditions. Such permit conditions include short term limits (e.g., the number of operating hours per 30 day rolling average) and corresponding recordkeeping provisions.

 The design capacity or maximum production capacity includes use of coatings and inks with the highest VOC content used in practice by the surface coating facility for the two (2) years preceding the effective date of this chapter.

(11) **Normally closed container**. "Normally closed container" means a container that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

(12) **Oven**. "Oven" means a chamber which is used to bake, cure, polymerize or dry a coating.

(13) **Plastisol**. "Plastisol" means a coating made of a mixture of finely divided resin and a plasticizer. Plastisol is applied as a thick gel that solidifies when heated.

(14) **Prime coat**. "Prime coat" means the first of two (2) or more coatings applied to a surface.

(15) **Roller coating**. "Roller coating" means the application of a coating to a substrate by means of hard rubber or metal rolls.

(16) **Substrate**. "Substrate" means the surface to which a coating is applied.

(17) **Web coating line**. "Web coating line" means all of the coating applicator(s), drying area(s), or oven(s), located between an unwind station and a rewind station, that are used to apply coating onto a continuous strip of substrate (the web). A web coating line need not have a drying oven in order to be included in this definition.

**B. Surface coating of cans**

(1) **Can**. "Can" means any cylindrical, single-walled container, with or without a top, cover, spout, or handle, that is manufactured from metal sheets thinner than 29 gauge (0.0141 inch (in)).

(2) **Can coating unit**. "Can coating unit" means a coating unit in which any coating is applied onto the surface of cans or can components.

(3) **End sealing compound coat**. "End sealing compound coat" means a compound applied onto can ends that functions as a gasket when the end is assembled onto the can.

(4) **Exterior basecoat**. "Exterior basecoat" means a coating applied to the exterior of a two-piece can body to provide protection to the metal, or to provide background for any lithographic or printing operation.

(5) **Interior body spray coat**. "Interior body spray coat" means a coating applied to the interior of the can body to provide a protective film between the product and the can.

(6) **Over varnish**. "Over varnish" means a coating applied directly over a design coating or directly over ink to reduce the coefficient of friction, to provide gloss, and to protect the finish against abrasion and corrosion.

(7) **Sheet basecoat**. "Sheet basecoat" means a coating applied to metal in sheet form to serve as either the exterior or interior of two-piece or three-piece can bodies or can ends.

(8) **Side-seam spray coat**. "Side-seam spray coat" means a coating applied to the seam of a three-piece can.

(9) **Three-piece can**. "Three-piece can" means a can that is made by rolling a rectangular sheet of metal into a cylinder that is soldered, welded, or cemented at the seam with two ends attached.

(10) **Two-piece can**. "Two-piece can" means a can whose body and one end are formed from a shallow cup and to which the other end is later attached.

(11) **Two-piece can exterior end coat**. "Two-piece can exterior end coat" means a coating applied by roller coating or spraying to the exterior end of a two-piece can to provide protection to the metal.

**C. Surface coating of fabric**

(1) **Fabric coating line**. "Fabric coating line" means a web coating line where coating is applied to fabric. A fabric printing line engaged in the dyeing and finishing of textiles as classified in Industrial Group 226 or Industry 2231 is not considered a fabric coating line.

(2) **Fabric coating unit**. "Fabric coating unit" means a coating application station and its associated flashoff area, drying area, or oven wherein coating is applied and dried or cured in a fabric coating line. A fabric coating line may include more than one fabric coating unit.

**D. Surface coating of vinyl**

**Vinyl coating line**. "Vinyl coating line" means a web coating line where a decorative, functional, or protective coating is applied to a continuous web coating line of vinyl or vinyl-coated fabric. Lines used for coating or printing on vinyl and coating or printing on urethane are considered vinyl coating lines.

**E. Surface coating of metal furniture**

(1) **Metal furniture**. "Metal furniture" means any furniture piece made of metal, or any metal part that will be assembled with other metal, wood, fabric, plastic or glass parts to form a furniture piece including, but not limited to, tables, chairs, waste baskets, beds, desks, lockers, benches, shelving, file cabinets and room dividers. This definition does not apply to the coating of miscellaneous metal and plastic parts and products as defined in Subsection 2(F)(5) of this chapter.

(2) **Metal furniture coating unit**. "Metal furniture coating unit" means a coating unit in which a protective, decorative, or functional coating is applied onto the surface of metal furniture.

**F. Surface coating of miscellaneous metal and plastic parts and products**

1. **Clear coating**. "Clear coating" means a coating that (1) either lacks color and opacity or is transparent, and (2) uses the surface to which it is applied as a reflective base or undertone color.
2. **Drum**. "Drum" means any cylindrical metal shipping container of thirteen (13) to 110-gallon capacity.
3. **Extreme performance coating**. "Extreme performance coating" means a coating intended for continuous or repeated exposure to extreme environmental conditions, including but not limited to, the outdoors, temperatures above 95 degrees C or 203 degrees F, detergents, abrasive and scouring agents, solvents, and corrosive atmospheres.
4. **Miscellaneous metal and plastic parts and products**. "Miscellaneous metal and plastic parts and products" means any metal and plastic parts such products include, but are not limited to, metal and plastic components of the following types of products as well as the products themselves: fabricated metal products, molded plastic parts, small and large farm machinery, commercial and industrial machinery and equipment, automotive or transportation equipment, interior or exterior automotive parts, construction equipment, motor vehicle accessories, bicycles and sporting goods, toys, recreational vehicles, pleasure craft (recreational boats), extruded aluminum structural components, railroad cars, heavier vehicles, lawn and garden equipment, business machines, laboratory and medical equipment, electronic equipment, steel drums, metal pipes, and other industrial and household products.

Miscellaneous metal and plastic parts and products does not include: 1) maintenance, repair or refinishing of machinery, production equipment, piping, storage vessels and similar parts where the part is to be used on site and not offered for sale; 2) shipbuilding operations; 3) the field application of coatings to stationary steel structures and their appurtenances; and 4) aerospace manufacturing, overhaul, and repair operations.

1. **Miscellaneous metal and plastic parts and products coating unit**. "Miscellaneous metal and plastic parts and products coating unit" means a coating unit in which a coating is applied to any miscellaneous metal and plastic parts and products.
2. **Pail**. "Pail" means any cylindrical metal shipping container of one (1) to twelve (12) gallon capacity and constructed of 29 gauge and heavier metal.
3. **Pleasure craft**. “Pleasure craft” means any marine or freshwater vessel manufactured or operated primarily for recreational purposes.
4. **Pleasure craft coating**. “Pleasure craft coating” means any marine coating, except unsaturated polyester resin (fiberglass), applied to a pleasure craft or to parts and components of a pleasure craft.
5. **Refinishing**. "Refinishing" means the repainting of used equipment.

**G. Surface coating of flatwood paneling**

(1) **Class I (or Class II) hardboard paneling finish**. "Class I (or Class II) hardboard paneling finish" means finishes that meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.

(2) **Flatwood paneling coating line**. "Flatwood paneling coating line" means a coating line used to apply and dry or cure coatings applied to one of the following flatwood paneling categories: printed interior panels made of hardwood plywood and thin particleboard (i.e., less than or equal to 0.64 centimeter (cm) (0.25 in) thick; natural finish hardwood plywood panels; Class II hardboard paneling finish; tileboard; and exterior siding. Flatwood paneling coating line does not include Class I hardwood panels, particle board used in furniture, insulation board, and soft plywood coating lines.

(3) **Hardboard**. "Hardboard" means a panel manufactured primarily from wood fibers that are consolidated under heat and pressure in a hot press.

(4) **Hardwood plywood**. "Hardwood plywood" means plywood whose surface layer is a veneer of hardwood.

(5) **Natural finish hardwood plywood panels**. "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

(6) **Printed interior panels**. "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoat upon which a simulated grain or decorative pattern is printed.

(7) **Thin particleboard**. "Thin particleboard" means a manufactured board that is 0.64 cm (0.25 in) or less in thickness made of individual wood particles that have been coated with a binder and formed into flat sheets by pressure.

(8) **Tileboard**. "Tileboard" means paneling that has a colored, waterproof surface coating.

**3. Compliance Methods.** The owner or operator of a surface coating unit, line or operation subject to this chapter shall choose one or more of the three compliance methods below in order to comply with the applicable emission limitations contained in this chapter.

**A. Low solvent content coating technology**. The owner or operator of a coating unit subject to this chapter that chooses to use a low solvent content coating may not cause or allow application of any coating on that coating unit with VOC content that exceeds the applicable emission limitations in this chapter.

**B. Daily-weighted average limitation**. The owner or operator of a coating unit under categories 1, 2 and 3, as specified in Subsection 1(A) of this chapter, that chooses to obtain compliance with the applicable emission limitations in this chapter by the daily-weighted average limitation may not apply during any day, coatings on that coating unit whose daily-weighted average VOC content exceeds the applicable emission limitations in Subsections 4(A) through 4(C) of this chapter, as calculated in Appendix A, Procedure C. Daily weighted cross-line averaging may be allowed on a case by case basis upon approval from the Department and EPA. Weekly weighted averaging may also be allowed on a case by case basis upon approval from the Department and EPA, and shall be calculated in accordance with Appendix A, Procedure C, substituting "weekly" for "daily", as appropriate.

**C. Add-on air pollution control devices.** The owner or operator of a coating unit that chooses to obtain compliance with the applicable emission limitations in this chapter by an add-on air pollution control device shall install and operate a capture system and control device and demonstrate a daily overall emission reduction efficiency which is the lesser of the value calculated according to the procedure described in Appendix A, Procedure C or 95%.

(1) The capture system and control device shall be operated at all times that the coating unit is in operation. The owner or operator shall demonstrate compliance with the applicable emission limitations in this chapter through the applicable test methods for coating analysis, capture system, control device and capture efficiency using the procedures described in Appendix A.

(2) The control device shall be equipped with the applicable monitoring equipment as specified in Appendix A, Procedure H and Procedure I, which shall be installed, calibrated, operated and maintained according to the manufacturer's specifications at all times.

**4.** **Emission Limitations.** The owner or operator of a surface coating unit, line or operation subject to this chapter shall comply with the applicable emission limitations in Subsections 4(A) through 4(F) of this chapter below, by the use of Low Solvent Content Coating Technology, Daily-Weighted Averaging, or Add-On Air Pollution Control Devices, as specified in Section 3 of this chapter. Emission limitations on VOC content for all surface coating categories are expressed in units of mass of VOC in kilograms (kg) or lb per volume of coating in liters (l) or gallons (gal), excluding water and exempt compounds, as applied. Emission limitations on VOC content for metal furniture and flatwood paneling are also expressed in units of mass of VOC in kilograms (kg) or pounds (lb) per volume in liters (l) or gallons (gal) of solids, as applied.

 If more than one surface coating category and emission limitation applies to a specific coating operation, then the least stringent emission limitation controls.

**A. Emission limitations for surface coating of cans**. This subsection applies to any can coating unit subject to emission limitations as specified in Sections 1 and 2 of this chapter, and used to apply the following coatings: sheet basecoat, exterior basecoat, over varnish, interior body spray coat, side-seam-spray coat, two-piece can exterior end coat and end sealing compound coat. The owner or operator of a can coating unit subject to this subsection may not cause or allow the release of VOC that exceeds the following emission limitations:

|  |  |  |
| --- | --- | --- |
| **Category** | **kg/l** | **lb/gal** |
|  |  |  |
| 1. Sheet basecoat | 0.34 | 2.8 |
| 2. Exterior basecoat | 0.34 | 2.8 |
| 3. Over varnish | 0.34 | 2.8 |
| 4. Interior body spray coat | 0.51 | 4.2 |
| 5. Side-seam spray coat | 0.66 | 5.5 |
| 6. Two piece can exterior end coat | 0.51 | 4.2 |
| 7. End sealing compound coat | 0.44 | 3.7 |

**B. Emission limitations for surface coating of fabric.** This subsection applies to any fabric coating unit or line subject to emission limitations as specified in Sections 1 and 2 of this chapter. The owner or operator of a fabric coating unit or line subject to this subsection may not cause or allow the release of VOC that exceeds the following emission limitation:

 0.35 kg/l (2.9 lb/gal)

**C. Emission limitations for surface coating of vinyl.** This subsection applies to any vinyl coating line subject to emission limitations as specified in Sections 1 and 2 of this chapter. This subsection does not apply to the application of vinyl plastisol to fabric to form the substrate that is subsequently coated. The owner or operator of a vinyl coating line subject to this subsection may not cause or allow the release of VOC that exceeds the following emission limitation:

 0.45 kg/l (3.8 lb/gal)

**D. Emission limitations for surface coating of metal furniture**

(1) This subsection applies to any metal furniture coating unit subject to emission limitations as specified in Sections 1 and 2 of this chapter. By January 1, 2012, the owner or operator of a metal furniture coating unit subject to this subsection shall meet the VOC emission limitations in either Table 1 or Table 2.

**Table 1: Emission limits expressed in terms of mass of VOC per volume of coating (excluding water and exempt compounds, as applied)**

|  |  |  |
| --- | --- | --- |
| **Coating Type** | **Baked** | **Air Dried** |
|  | **kg/l** | **lb/gal** | **kg/l** | **lb/gal** |
| General, One Component | 0.275 | 2.3 | 0.275 | 2.3 |
| General, Multi-Component | 0.275 | 2.3 | 0.340 | 2.8 |
| Extreme High Gloss | 0.360 | 3.0 | 0.340 | 2.8 |
| Extreme Performance | 0.360 | 3.0 | 0.420 | 3.5 |
| Heat Resistant | 0.360 | 3.0 | 0.420 | 3.5 |
| Metallic | 0.420 | 3.5 | 0.420 | 3.5 |
| Pretreatment Coatings | 0.420 | 3.5 | 0.420 | 3.5 |
| Solar Absorbent | 0.360 | 3.0 | 0.420 | 3.5 |

**Table 2: Emission limits expressed in terms of mass of VOC per volume of solids, as applied**

|  |  |  |
| --- | --- | --- |
| **Coating Type** | **Baked** | **Air Dried** |
|  | **kg/l** | **lb/gal** | **kg/l** | **lb/gal** |
| General, One Component | 0.40 | 3.3 | 0.40 | 3.3 |
| General, Multi-Component | 0.40 | 3.3 | 0.55 | 4.5 |
| Extreme High Gloss | 0.61 | 5.1 | 0.55 | 4.5 |
| Extreme Performance | 0.61 | 5.1 | 0.80 | 6.7 |
| Heat Resistant | 0.61 | 5.1 | 0.80 | 6.7 |
| Metallic | 0.80 | 6.7 | 0.80 | 6.7 |
| Pretreatment Coatings | 0.80 | 6.7 | 0.80 | 6.7 |
| Solar Absorbent | 0.61 | 5.1 | 0.80 | 6.7 |

(2) The following types of coatings and coating operations for metal furniture are exempt from the VOC content limits:

(a) Stencil coatings;

(b) Safety-indicating coatings;

(c) Solid-film lubricants;

(d) Electric-insulating and thermal-conducting coatings;

(e) Touch-up and repair coatings; and

(f) Coating application utilizing hand-held aerosol cans.

**E. Emission limitations for surface coating of flatwood paneling**. This subsection applies to any flatwood paneling coating line subject to emission limitations as specified in Sections 1 and 2 of this chapter. By January 1, 2012, the owner or operator of a flatwood paneling coating line subject to this subsection may not cause or allow the release of VOC that exceeds the following applicable emission limitations:

|  |  |  |
| --- | --- | --- |
| **Category** | **lb VOC per gallon of material (grams VOC per liter)** | **lb VOC per gallon solids (grams VOC per liter solids)** |
|  |  |  |
| 1. Printed interior panels made of hardwood, plywood, or thin particleboard | 2.1 (250) | 2.9 (350) |
| 2. Natural finish hardwood plywood panels | 2.1 (250) | 2.9 (350) |
| 3. Class II hardboard paneling finish | 2.1 (250) | 2.9 (350) |
| 4. Tileboard | 2.1 (250) | 2.9 (350) |
| 5. Exterior siding | 2.1 (250) | 2.9 (350) |

**F. Emission limitations for surface coating of miscellaneous metal and plastic parts and products.** This subsection applies to any miscellaneous metal and plastic parts and products coating unit subject to emission limitations as specified in Sections 1 and 2 of this chapter. This subsection does not apply to the coating of metal cans or to the coating of metal furniture which are subject to Subsections 4(A) and 4(E) of this chapter, respectively.

1. Prior to January 1, 2016, the owner or operator of a miscellaneous metal parts and products coating unit subject to this subsection may not cause or allow the release of VOC that exceeds the following emission limitations:

|  |  |  |
| --- | --- | --- |
| **Category** | **kg/l** | **lb/gal** |
|  |  |  |
| 1. Clear coating | 0.52 | 4.3 |
| 2. Steel pail and drum interior | 0.52 | 4.3 |
| 3. Air-dried coating | 0.42 | 3.5 |
| 4. Extreme performance coating | 0.42 | 3.5 |
| 5. All other coatings | 0.36 | 3.0 |

(2) By January 1, 2016, the owner or operator of a miscellaneous metal or plastic parts and products coating operation, including miscellaneous metal parts and products, miscellaneous plastic parts and products, automotive/transportation and business machine plastic parts, pleasure craft and motor vehicle materials (located at a facility that is not an automobile or light-duty truck assembly coating facility), subject to this subsection shall achieve the VOC limits specified in section 4(F)(5)-(6) using one of the following control options:

(a) **Control option 1**: Use low-VOC content coating limits, as applied, excluding water and exempt compounds, specified in Subsection 4(F)(5) and use one or more of the application methods specified in Subsection 4(F)(3);

(b) **Control option 2**: Use a combination of low-VOC content coating and add-on air pollution control equipment to achieve a VOC emission rate no greater than the level specified in Subsection 4(F)(6)and use one or more of the application methods specified in Subsection 4(F)(3); or

(c) **Control option 3**: Install, operate and maintain according to the manufacturer’s recommendations air pollution control equipment that reduces uncontrolled VOC emissions by an overall control efficiency of at least 95%.

(3) Except as provided in Subsection 4(F)(4) of this chapter, the owner or operator of a miscellaneous metal and plastic parts and products coating operation controlling VOC emissions by using control option 1 or 2 as specified in Subsections 4(F)(2)(a) and 4(F)(2)(b) of this chapter shall use one or more of the following application methods:

(a) High volume-low pressure (HVLP) spray;

(b) Electrostatic spray;

(c) Zinc-arc spray;

(d) Air-assisted airless spray;

(e) Airless spray;

(f) A flow coating technique;

(g) Dip coat, including electrodeposition; or

(h) Another method with a transfer efficiency equivalent to or better than that achieved by HVLP spraying.

(4) **Exemptions**: The requirement in Subsection 4(F)(3) of this chapter shall not apply to:

(a) A miscellaneous metal products coating operation when:

(i) Applying touchup or repair coatings;

(ii) Applying textured finishes; or

(iii) Implementing control option 3 as described in Subsection 4(F)(2)(c) of this chapter;

(b) Airbrush operations using 5 gallons or less per 12 month rolling period of coating at a miscellaneous plastic parts coating operation; or

(c) A pleasure craft surface coating operation when applying extreme high-gloss coatings.

(5) **Limits for Control option 1**: Use low-VOC content coating:

**Table 1. Miscellaneous Metal Parts and Products VOC Content Limits**

|  |  |  |
| --- | --- | --- |
| **Coating category** | **Air Dried** | **Baked** |
|  | **kg VOC/l coating** | **lb VOC/gal coating** | **kg VOC/l coating** | **lb VOC/gal coating** |
| General One Component | 0.34 | 2.8 | 0.28 | 2.3 |
| General Multi Component |
| Camouflage | 0.42 | 3.5 | 0.42 | 3.5 |
| Electric-Insulating Varnish |
| Etching Filler |
| Extreme High-Gloss | 0.36 | 3.0 |
| Extreme Performance |
| Heat-Resistant |
| High Performance Architectural | 0.74 | 6.2 | 0.74 | 6.2 |
| High Temperature | 0.42 | 3.5 | 0.42 | 3.5 |
| Metallic |
| Military Specification | 0.34 | 2.8 | 0.28 | 2.3 |
| Mold-Seal | 0.42 | 3.5 | 0.42 | 3.5 |
| Pan Backing |
| Prefabricated Architectural Multi-Component | 0.28 | 2.3 |
| Prefabricated Architectural One-Component |
| Pretreatment Coatings | 0.42 | 3.5 |
| Repair and Touch Up | 0.36 | 3.0 |
| Silicone Release | 0.42 | 3.5 |
| Solar-Absorbent | 0.36 | 3.0 |
| Vacuum-Metalizing | 0.42 | 3.5 |
| Drum Coating, New, Exterior | 0.34 | 2.8 | 0.34 | 2.8 |
| Drum Coating, New, Interior | 0.42 | 3.5 | 0.42 | 3.5 |
| Drum Coating, Reconditioned, Exterior |
| Drum Coating, Reconditioned, Interior | 0.50 | 4.2 | 0.50 | 4.2 |

 The VOC limits for miscellaneous metal parts and products specified in the above table shall not apply to the following types of coatings and coating operations:

(a) Stencil coatings;

(b) Safety-indicating coatings;

(c) Solid-film lubricants;

(d) Electric-insulating and thermal-conducting coatings;

(e) Magnetic data storage disk coatings; and

(f) Plastic extruded onto metal parts to form a coating.

**Table 2. Miscellaneous Plastic Parts and Products VOC Content Limits**

|  |  |  |
| --- | --- | --- |
| **Coating category** | **kg VOC/liter coating** | **lbs VOC/gal coating** |
| General One Component | 0.28 | 2.3 |
| General Multi Component | 0.42 | 3.5 |
| Electric Dissipating Coatings and Shock-Free Coatings | 0.80 | 6.7 |
| Extreme Performance | 0.42(2-pack coatings) | 3.5(2-pack coatings) |
| Metallic | 0.42 | 3.5 |
| Military Specification | 0.34 (1 pack)0.42 (2 pack) | 2.8 (1 pack)3.5 (2 pack) |
| Mold-Seal | 0.76 | 6.3 |
| Multi-colored Coatings | 0.68 | 5.7 |
| Optical Coatings | 0.80 | 6.7 |
| Vacuum-Metalizing |

The VOC limits for miscellaneous plastic parts and products specified in the above table shall not apply to the following types of coatings and coating operations:

(a) Touch-up and repair coatings;

(b) Stencil coatings applied on clear or translucent substrates;

(c) Clear or translucent coatings;

(d) Coatings applied at a paint manufacturing facility while conducting performance tests on the coatings;

(e) Any individual coating category used in volumes less than 50 gallons in any one 12 month rolling period, if substitute compliant coatings are not available, provided that the total usage of all such coatings does not exceed 200 gallons per 12 month rolling period, per facility;

(f) Reflective coating applied to highway cones;

(g) Mask coatings that are less than 0.5 millimeter thick when dried and the area coated is less than 25 square inches;

(h) EMI/RFI shielding coatings; and

(i) Heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices, provided that the total usage of all such coatings does not exceed 100 gallons per 12 month rolling period, per facility.

**Table 3. Automotive/Transportation and Business Machine Plastic Parts VOC Content Limits**

|  |  |  |
| --- | --- | --- |
| **Coating category** | **kg VOC/liter coating** | **lbs VOC/gal coating** |
| **Automotive/Transportation Coatings1** |  |  |
|  |  |  |
| 1. High Bake Coatings – Interior and Exterior Parts |  |  |
| Flexible Primer | 0.54 | 4.5 |
| Non-flexible Primer | 0.42 | 3.5 |
| Base Coats | 0.52 | 4.3 |
| Clear Coat | 0.48 | 4.0 |
| Non-basecoat/clear coat | 0.52 | 4.3 |
| 2. Low Bake/Air Dried Coatings – Exterior Parts |  |  |
| Primers | 0.58 | 4.8 |
| Basecoat | 0.60 | 5.0 |
| Clearcoats | 0.54 | 4.5 |
| Non-basecoat/clearcoat | 0.60 | 5.0 |
| 3. Low Bake/Air Dried Coatings – Interior Parts |
| 4. Touch up and Repair Coatings | 0.62 | 5.2 |
|  |  |  |
| **Business Machine Coatings** |  |  |
|  |  |  |
| 1. Primers | 0.35 | 2.9 |
| 2. Topcoat |
| 3. Texture coat |
| 4. Fog Coat |  0.26 |  2.2 |
| 5. Touch up and Repair coatings | 0.35 | 2.9 |

1For red, yellow and black automotive coatings, except touch up and repair coatings, the limit is determined by multiplying the appropriate limit in this table by 1.15.

The VOC limits for automotive/transportation and business machine plastic parts specified in the above table shall not apply to the following types of coatings and coating operations:

(a) Texture coatings;

(b) Vacuum-metalizing coatings;

(c) Gloss reducers;

(d) Texture topcoats;

(e) Adhesion primers;

(f) Electrostatic preparation coatings;

(g) Resist coatings; and

(h) Stencil coatings.

**Table 4. Pleasure Craft Surface Coating VOC Content Limits**

|  |  |  |
| --- | --- | --- |
| **Coating category** | **kg VOC/liter coating** | **lbs VOC/gal coating** |
| Extreme High Gloss Topcoat | 0.60 | 5.1 |
| High Gloss Topcoat | 0.42 | 3.5 |
| Pretreatment Wash Primers | 0.78 | 6.5 |
| Finish Primer/Surfacer |  0.42 |  3.5 |
| High Build Primer Surfacer | 0.34 | 2.8 |
| Aluminum Substrate Antifoulant Coating | 0.56 | 4.7 |
| Antifouling Sealer/Tie Coating | 0.42 | 3.5 |
| Other Substrate Antifoulant Coating | 0.40 | 3.3 |
| All other pleasure craft surface coatings for metal or plastic | 0.42 | 3.5 |

**Table 5. Motor Vehicle Materials VOC Content Limits**

|  |  |  |
| --- | --- | --- |
| **Coating category** | **kg VOC/liter coating** | **lbs VOC/gal coating** |
| Motor vehicle cavity wax | 0.65 | 5.4 |
| Motor vehicle sealer |
| Motor vehicle deadener |
| Motor vehicle gasket/gasket sealing material | 0.20 | 1.7 |
| Motor vehicle underbody coating | 0.65 | 5.4 |
| Motor vehicle trunk interior coating | 0.65 | 5.4 |
| Motor vehicle bedliner | 0.20 | 1.7 |
| Motor vehicle lubricating wax/compound | 0.70 | 5.8 |

(6) Limits for Control option 2: Use a combination of low-VOC content coating and add-on air pollution control equipment:

**Table 1. Miscellaneous Metal Parts and Products VOC Emission Rate Limits**

**(VOC per Volume Solids)**

|  |  |  |
| --- | --- | --- |
| **Coating category** | **Air Dried** | **Baked** |
|  | **kg VOC/l solids** | **lb VOC/gal solids** | **kg VOC/l solids** | **lb VOC/gal solids** |
| General One Component | 0.54 | 4.52 | 0.40 | 3.35 |
| General Multi Component |
| Camouflage | 0.80 | 6.67 | 0.80 | 6.67 |
| Electric-Insulating Varnish |
| Etching Filler |
| Extreme High-Gloss | 0.61 | 5.06 |
| Extreme Performance |
| Heat-Resistant |
| High Performance Architectural | 4.56 | 38.0 | 4.56 | 38.0 |
| High Temperature | 0.80 | 6.67 | 0.80 | 6.67 |
| Metallic |
| Military Specification | 0.54 | 4.52 | 0.40 | 3.35 |
| Mold-Seal | 0.80 | 6.67 | 0.80 | 6.67 |
| Pan Backing |
| Prefabricated Architectural Multi-Component | 0.40 | 3.35 |
| Prefabricated Architectural One-Component | 0.80 | 6.67 | 0.40 | 3.35 |
| Pretreatment Coatings | 0.80 | 6.67 |
| Silicone Release |
| Solar-Absorbent | 0.61 | 5.06 |
| Vacuum-Metalizing | 0.80 | 6.67 |
| Drum Coating, New, Exterior | 0.54 | 4.52 | 0.54 | 4.52 |
| Drum Coating, New, Interior | 0.80 | 6.67 | 0.80 | 6.67 |
| Drum Coating, Reconditioned, Exterior |
| Drum Coating, Reconditioned, Interior | 1.17 | 9.78 | 1.17 | 9.78 |

 The VOC limits for miscellaneous metal parts and products specified in the above shall not apply to the following types of coatings and coating operations:

(a) Stencil coatings;

(b) Safety-indicating coatings;

(c) Solid-film lubricants;

(d) Electric-insulating and thermal-conducting coatings;

(e) Magnetic data storage disk coatings; and

(f) Plastic extruded onto metal parts to form a coating.

**Table 2. Miscellaneous Plastic Parts and Products VOC Emission Rate Limits**

**(VOC per Volume Solids)**

|  |  |  |
| --- | --- | --- |
| **Coating category** | **kg VOC/liter solids** | **lbs VOC/gal solids** |
| General One Component | 0.40 | 3.35 |
| General Multi Component | 0.80 | 6.67 |
| Electric Dissipating Coatings and Shock-Free Coatings | 8.96 | 74.7 |
| Extreme Performance | 0.80(2-pack coatings) | 6.67(2-pack coatings) |
| Metallic | 0.80 | 6.67 |
| Military Specification | 0.54 (1 pack)0.80 (2 pack) | 4.52 (1 pack)6.67 (2 pack) |
| Mold-Seal | 5.24 | 43.7 |
| Multi-colored Coatings | 3.04 | 25.3 |
| Optical Coatings | 8.96 | 74.7 |
| Vacuum-Metalizing |

 The VOC limits for miscellaneous plastic parts and products specified in the above table shall not apply to the following types of coatings and coating operations:

(a) Touch-up and repair coatings;

(b) Stencil coatings applied on clear or translucent substrates;

(c) Clear or translucent coatings;

(d) Coatings applied at a paint manufacturing facility while conducting performance tests on the coatings;

(e) Any individual coating category used in volumes less than 50 gallons in any one 12-month rolling period, if substitute compliant coatings are not available, provided that the total usage of all such coatings does not exceed 200 gallons per rolling period, per facility;

(f) Reflective coating applied to highway cones;

(g) Mask coatings that are less than 0.5 millimeter thick when dried and the area coated is less than 25 square inches;

(h) EMI/RFI shielding coatings; and

(i) Heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices, provided that the total usage of all such coatings does not exceed 100 gallons per 12 month rolling period, per facility.

**Table 3. Automotive/Transportation and Business Machine Plastic Parts VOC Emission Rate Limits (VOC per Volume Solids)**

|  |  |  |
| --- | --- | --- |
| **Coating category** | **kg VOC/liter solids** | **lbs VOC/gal solids** |
| **Automotive/Transportation Coatings1** |  |  |
|  |  |  |
| 1. High Bake Coatings – Interior and Exterior Parts |  |  |
| Flexible Primer | 1.39 | 11.58 |
| Non-flexible Primer | 0.80 | 6.67 |
| Base Coats | 1.24 | 10.34 |
| Clear Coat | 1.05 | 8.76 |
| Non-basecoat/clear coat | 1.24 | 10.34 |
| 2. Low Bake/Air Dried Coatings – Exterior Parts |  |  |
| Primers | 1.66 | 13.80 |
| Basecoat | 1.87 | 15.59 |
| Clearcoats | 1.39 | 11.58 |
| Non-basecoat/clearcoat | 1.87 | 15.59 |
| 3. Low Bake/Air Dried Coatings – Interior Parts |
| 4. Touch up and Repair Coatings | 2.13 | 17.72 |
|  |  |  |
| **Business Machine Coatings** |  |  |
|  |  |  |
| 1. Primers | 0.57 | 4.80 |
| 2. Topcoat |
| 3. Texture coat |
| 4. Fog Coat | 0.38 | 3.14 |
| 5. Touch up and Repair coatings | 0.57 | 4.80 |

1For red, yellow and black automotive coatings, except touch up and repair coatings, the limit is determined by multiplying the appropriate limit in this table by 1.15.

The VOC limits for automotive/transportation and business machine plastic parts specified in the above table shall not apply to the following types of coatings and coating operations:

(a) Texture coatings;

(b) Vacuum-metalizing coatings;

(c) Gloss reducers;

(d) Texture topcoats;

(e) Adhesion primers;

(f) Electrostatic preparation coatings;

(g) Resist coatings; and

(h) Stencil coatings.

**Table 4. Pleasure Craft Surface Coating VOC Emission Rate Limits (VOC per Volume Solids)**

|  |  |  |
| --- | --- | --- |
| **Coating category** | **kg VOC/liter solids** | **lbs VOC/gal solids** |
| Extreme High Gloss Topcoat | 1.10 | 9.2 |
| High Gloss Topcoat | 0.80 | 6.7 |
| Pretreatment Wash Primers | 6.67 | 55.6 |
| Finish Primer/Surfacer | 0.80 | 6.7 |
| High Build Primer Surfacer | 0.55 | 4.6 |
| Aluminum Substrate Antifoulant Coating | 1.53 | 12.8 |
| Antifouling sealer or tie coat | 0.80 | 6.7 |
| Other Substrate Antifoulant Coating | 0.53 | 4.4 |
| All other pleasure craft surface coatings for metal or plastic | 0.80 | 6.7 |

**G.** Notwithstanding the requirements of this Subsection, an owner or operator may use in the aggregate, up to 50 gallons of coatings that exceed the emissions limitations set forth in Subsections 4(A) through 4(F) of this chapter, for any twelve (12) consecutive months, provided such owner or operator maintains records of such coatings in accordance with Subsection 7(B)(2) of this chapter.

**5. Handling, Storage and Disposal of Materials Containing VOC.** This section applies to any surface coating facility subject to this chapter.

**A.** Vapor-tight containers shall be used for the storage of spent or fresh VOC and for the storage or disposal of cloth or paper impregnated with VOC that are used for surface preparation, clean up or coating removal.

**B.** The use of VOC is prohibited for cleanup operations unless equipment is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere. The owner or operator of a surface coating unit, line or operation subject to this chapter shall comply with the following work practice standards:

(1) **Spray gun cleaning**. The owner or operator of a surface coating unit, line or operation subject to this chapter shall collect all organic solvent used to clean spray guns into a normally closed container.

(2) **Line cleaning**. The owner or operator of a surface coating unit, line or operation subject to this chapter shall pump or drain all organic solvent used for line cleaning into a normally closed container.

(3) **Spray booth cleaning**. The owner or operator of a surface coating unit, line or operation subject to this chapter shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyers, continuous coaters and their enclosures, and/or metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is, the spray booth coating or other material used to cover the booth is being replaced, the affected source may not use more than 1.0 gallon of organic solvent to prepare the booth prior to applying the booth coating.

(4) **Washoff operations**. The owner or operator of a surface coating unit, line or operation subject to this chapter shall control emissions from washoff operations by:

(a) Using normally closed tanks for washoff; and

(b) Minimizing dripping by tilting or rotating the part to drain as much organic solvent as possible.

**6.** **Test Methods and Compliance Procedures.** The owner or operator of any surface coating unit, line or operation subject to this chapter shall collect and record the applicable information, and where required, perform compliance testing and demonstrate compliance by using the methods and procedures described in this chapter, Appendix A, Procedures A through C and Procedures E through I, and submit a report to the Department of the results as stipulated in Section 8 of this chapter. At least a thirty (30)-day advance notification to the Department shall precede all tests.

 The owner or operator of a surface coating unit, line or operation subject to this chapter shall perform additional testing and submit a report within ninety (90) days of receipt of notice from the Department if equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that the surface coating facility may be operating out of compliance with the emission limitations.

**7.** **Initial Compliance Certification and Recordkeeping Procedures.** Each owner or operator of a surface coating facility subject to this chapter shall establish and maintain all records necessary for determining compliance with the emission limitations in this chapter for a period of six (6) years. The owner or operator of a surface coating facility subject to this chapter shall further make such records and reports available for inspection during normal business hours and shall provide copies to the Department or the Environmental Protection Agency upon request.

**A. Initial compliance certification.** The owner or operator of each surface coating facility subject to this chapter shall submit an initial certification report upon becoming subject to this chapter. The owner or operator of a surface coating facility subject to this chapter whose total actual coatings usage from all coating units, lines or operations at the surface coating facility under the same surface coating category is 50 or more gallons per 12 month period shall submit to the Department, certification records covering the relevant coating unit, line or operation, and method of compliance upon startup of any new coating unit, line or operation or upon changing the method of compliance for an existing coating unit, line or operation.

(1) **Coating units, lines or operations exempt from emission limitations**. Certification records required for coating units, lines or operations which are exempt from the emission limitations in this chapter shall include a certification to the Department that the surface coating unit, line or operation is exempt, and provide the following:

(a) Name and location of surface coating facility;

(b) Name, address and telephone number of person responsible for the surface coating facility;

(c) A declaration that the surface coating unit, line or operation is exempt, because combined VOC emissions from all coating units, lines and operations under the same surface coating category at the same surface coating facility are below the emissions threshold under Subsection 1(C) of this chapter. The following equations shall be used to calculate maximum theoretical emissions of VOC per 12 month period before the application of capture systems and control devices for each affected coating unit, line or operation at the surface coating facility:

 

 Where;

 "Ep" means the maximum theoretical emissions of VOC from one coating unit in pounds per 12 month period(lb/yr)

 "A" means the weight of VOC per volume of the coating with the highest VOC content, as applied, each 12 month period on the coating unit in pounds of VOC per gallon of coating (lb/gal)

 "B" means the total volume of all coating that can be potentially applied each year on the coating unit in gallons per 12 month period. The instrument or method by which the owner or operator accurately measured or calculated the volume of coating applied and the amount that can potentially be applied each year shall be described in the certification to the Department; and

(d) For coating units under the category of miscellaneous metal and plastic parts and products, except for those coating units which meet each of the criteria listed in Subsections 1(C)(1) through 1(C)(3) of this chapter, calculations of the total VOC emissions for a day that is representative of current maximum production levels from all miscellaneous metal and plastic parts and products surface coating units at the surface coating facility. The following equation shall be used to calculate total VOC emissions for that day:

 

 where,

 "T" means the total VOC emissions from coating units at the surface coating facility before the application of capture systems and control devices in units of kg/day (lb/day)

 "n" means the number of different coatings applied on each coating unit at the surface coating facility

 "i" the subscript denoting an individual coating

 "Ai"means the mass of VOC per volume of coating (i), excluding water and exempt compounds, as applied, used at the surface coating facility in units of kilograms of VOC per liter of coating (kg/l) or pounds of VOC per gallon of coating (lb/gal)

 "Bi"means the volume of coating (i), excluding water and exempt compounds, as applied, used at the surface coating facility in units of liter per day (l/day) or gallons per day (gal/day). The instrument or method used by the owner or operator of the surface coating facility to accurately measure or calculate the volume of each coating, as applied, shall be described in the certification to the Department.

(2) **Coating units, lines or operations using the Low Solvent Content Coating Technology Compliance Method**. Initial certification records required for coating units, lines or operations using the low solvent content coating technology compliance method shall include:

(a) Name and location of surface coating facility;

(b) Name, address and telephone number of the person responsible for the surface coating facility;

(c) Identification of each coating used on each identified coating unit, line or operation subject to this chapter;

(d) The mass of VOC per volume of each coating, excluding water and exempt compounds, as applied, used each day on each coating unit, line or operation; and

(e) The time at which the surface coating facility's "day" begins if a time other than midnight, local time, is used to define a "day."

(3) **Coating Units, Lines or Operations Using the Daily-Weighted Averaging Compliance Method**. Certification records required for coating units, lines or operations using the daily-weighted averaging compliance method shall include:

(a) Name and location of the surface coating facility;

(b) Name, address and telephone number of the person responsible for the surface coating facility;

(c) Identification of each coating used on each identified coating unit, line or operation subject to this chapter;

(d) Name and identification of each coating unit, line or operation that will comply by means of daily-weighted averaging;

(e) The instrument or method by which the owner or operator of the surface coating facility will accurately measure or calculate the volume of each coating, excluding water and exempt compounds, as applied, used each day on each coating unit, line or operation;

(f) The method by which daily records will be created and maintained as defined in this section;

(g) The calculation of the daily-weighted average, using Procedure C described in Appendix A of this chapter; and

(h) The time at which the surface coating facility's "day" begins if a time other than midnight, local time, is used to define a day.

(4) **Coating Units, Lines or Operations Using the Add-On Air Pollution Control Device Compliance Method**. Initial certification records required forcoating units, lines or operations using the add-on air pollution control device compliance method shall include the results of all tests and calculations necessary to demonstrate compliance with this chapter using procedures A through C and procedure E, as described in Appendix A of this chapter and shall include:

(a) Name and location of the surface coating facility;

(b) Name, address and telephone number of the person responsible for the surface coating facility;

(c) Identification of each coating used on each identified coating unit, line or operation subject to this chapter;

(d) The mass of VOC per volume of each coating, excluding water and exempt compounds, as applied, used each day on each coating unit, line or operation;

(e) The maximum VOC content (mass of VOC per coating unit volume of coating solids, as applied), or the daily-weighted average VOC content (mass of VOC per coating unit volume of coating solids, as applied) of the coatings used each day on each coating unit, line or operation; and

(f) The overall emission reduction efficiency for each day for each coating unit, line or operation required by Subsection 3(C) of this chapter and determined using Procedure E in Appendix A attached to this chapter.

**B. Recordkeeping**. The owner or operator of each surface coating facility subject to this chapter shall begin to maintain the records required herein on the effective date of this chapter.

(1) **Coating units, lines or operations exempt from emission limitations**. Monthly records shall be maintained on premises to document the name and identification of each coating and the mass of VOC per volume of each coating, excluding water and exempt compounds, as applied, used on each coating unit, line or operation, and the total emissions at the surface coating facility.

 Miscellaneous metal and plastic parts and products surface coating facilities that do not meet each of the criteria listed in Subsections 1(C)(1) through 1(C)(3) of this chapter shall maintain daily records on the premises to document the name and identification of each coating and the mass of VOC per volume of each coating, excluding water and exempt compounds, as applied, used each day on each coating unit, line or operation, and the total daily VOC emissions at the surface coating facility, as calculated using the equation in Subsection 7(A)(1)(d) of this chapter.

 Miscellaneous metal and plastic parts and products surface coating facilities that meet each of the criteria listed in Subsections 1(C)(1) through 1(C)(3) of this chapter shall maintain monthly records on the premises to document the name and identification of each coating and the mass of VOC per volume of each coating, excluding water and exempt compounds, as applied, used each month on each coating unit, line or operation, and the total emissions at the surface coating facility each month.

(2) **Coating units, lines or operations using the Low Solvent Content Coating Technology Compliance Method**. Except in the case where a coating unit, line or operation certifies under Section 8 of this chapter that all of the coatings used at the surface coating facility use low solvent content coating technology, daily records shall be maintained on premises to document the name and identification of each coating, and the mass of VOC per volume of each coating, excluding water and exempt compounds, as applied, used each day on each coating unit, line or operation. For surface coating facilities, which certify under Section 8 of this chapter that all of the coatings used at the surface coating facility use low solvent content coating technology, monthly records shall be maintained on the premises to document the name and identification of each coating and the mass of VOC per volume of each coating, excluding water and exempt compounds, as applied, used each month on each coating unit, line or operation.

(3) **Coating units, lines or operations using the Daily-Weighted Averaging Compliance Method**. Daily records shall be maintained on premises to document the following information:

(a) The name and identification of each coating and the mass of VOC per volume and the volume of each coating, excluding water and exempt compounds, as applied, on each coating unit, line or operation; and

(b) Daily records shall be maintained on premises to document the daily-weighted average VOC content of all coatings, as applied, on each coating unit, line or operation calculated according to Procedure C in Appendix A of this chapter.

(4) **Coating units, lines or operations using the Add-On Air Pollution Control Device Compliance Method**. Daily records shall be maintained on premises to document the following data:

(a) The actual overall emission reduction efficiency achieved for each day for each coating unit, line or operation as determined using Procedure E in Appendix A;

(b) Control device monitoring data as specified in Appendix A for Procedures H and I;

(c) A log of operating time for the capture system, control device and monitoring equipment and associated coating unit, line or operation;

(d) A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of outages;

(e) For thermal incinerators, all continuous three (3)-hour periods of operation in which the average combustion temperature was more that 28 degrees C (50 degrees F) below the average combustion temperature during the most recent performance test that demonstrated that the surface coating unit, line or operation was in compliance;

(f) For catalytic incinerators, all continuous three (3)-hour periods of operation in which the average temperature of the process vent stream immediately before the catalyst bed is more than 28 degrees C (50 degrees F) below the average temperature of the process vent stream immediately before the catalyst bed during the most recent performance test that demonstrated that the surface coating unit, line or operation was in compliance; and

(g) For carbon adsorbers, all continuous three (3)-hour periods of operation during which the average VOC concentration or the reading of organics in the exhaust gases is more than twenty (20) % greater than the average exhaust gas concentration or reading measured by the organics monitoring device during the most recent determination of the recovery efficiency of the carbon adsorber that demonstrated that the surface coating unit, line or operation was in compliance.

**8**. **Reporting.** The owner or operator of any surface coating unit, line or operation subject to this chapter shall provide to the Department the following:

1. **Initial compliance certification.** The owner or operator of each surface coating unit, line or operation subject to this chapter shall provide to the Department, an initial compliance certification upon becoming subject to this chapter.

**B. Reports of excess emissions.** Any owner or operator of a surface coating unit, line or operation that emits VOC in excess of the emission limitations in this chapter shall notify the Department in writing within thirty (30) calendar days of the following:

(1) For surface coating units, lines or operations exempt from the emission limitations in this chapter, any evidence showing that combined VOC emissions exceed the applicability threshold in Subsection 1(C) of this chapter; or

(2) For surface coating units, lines or operations subject to the emission limitations in this chapter, any evidence showing excess emissions, the use of any coatings that do not use low solvent content coating technology, non-compliance with the daily-weighted average limitations, or malfunctions of the control device(s).

**9. Compliance Schedule.** Except as otherwise noted, the owner or operator of a surface coating unit, line or operation subject to this chapter shall comply with this as of the effective date of the regulation.

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